REMARKS

Reconsideration of this application, as amended, is respectfully requested.

The indication of allowable subject matter is gratefully acknowledged.

The specification has been amended to overcome the objections thereto set forth at page 2 of the Office Action.

The relevant claims have been amended to overcome the objections to claims 51 and 73 and the 35 U.S.C. §112, second paragraph rejections of claims 49, 56, 63, and 64. It is believed that "CFC" will be understood by the skilled artisan and is not indefinite.

Claims 36, 37, 39-42, 49, 53, 54, 57, 59 and 60 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by the German reference '983. Applicants respectfully traverse.

The gist of the present invention is based on solving the problem of avoiding the "encapsulation" of individual workpieces in molded parts accurately matched to each workpiece and thereby enabling a large-scale or mass production to be carried out by introducing a plurality of workpieces jointly in a mold body that still does not have to be accurately adapted to the workpieces and can be reused as often as desired and by means of which the outer surfaces of the workpieces that are subsequently still to be machined are protected against thermochemical treatment, possibly with the exception of the annular surface region 6 (Fig.1), which however may be associated with the inner surface region 5.

DE '983 discloses carburization of hollow bodies with different wall thicknesses, such as nozzles for diesel engines, to encase the regions of thin-walled sections in jackets, in which a carburization process takes place at a lesser intensity that on the remaining surface regions, in order to avoid "through-carburization: and embrittlement. This also applies to an embodiment in which several thin-walled sections of the nozzles are introduced through bores into a common, box-shaped cavity. For all embodiments, all surface regions, i.e., including the external regions

of the workpieces, are to be carburized, and the surroundings of both the thick-walled and also the thin-walled sections of the hollow bodies participate in a mutually throttled manner, for example, via the nozzle bores themselves, in the periodic gaseous exchange in a vacuum furnace. The carburization and subsequent hardening of the external surfaces is extremely disadvantageous for a subsequent metal-cutting machining of the workpieces.

The process according to DE '983 does not hermetically protect the outer surface against carburization. It only discloses that areas with thinner wall thickness could be reached by less carbon gas in order to prevent cracking. The lesser amount of gas is included in spaces between the outer surface or surfaces and the casings. It is stated that the carburizing gas is also exchanged by pressure pulsing of the gas atmosphere within the furnace.

The cited reference does not provide any prototype or suggestion for solving this problem, since according to the citation all surface regions (internal and external) should be thermochemically treated, the thin-walled sections being less actively treated. It also does not make sense to machine the outer surfaces of the workpieces prior to their finished state before the treatment since the thermochemical treatment to be carried out at high temperatures produces a change in shape. Such outer surfaces in many cases have to be provided with threads that must be capable of engaging with counter-threads, and the cutting or grinding of threads on a hardened surface creates known problems.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0624, under Order No. NY-ALD-231.1-US. A duplicate copy of this paper is enclosed.

Respectfully submitted

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